High pollen count forecast this week

Description

The cold and unsettled weather that the UK saw this spring has lead to relatively low pollen counts so far this season. However, with fine and warm weather expected during the rest of the first week of June, high pollen counts are forecast across many parts of the country.

The pollen forecast, sponsored by Benadryl®, uses our latest weather forecast information and combine this with pollen readings from across the UK.

Yolanda Clewlow, Health Manager at the Met Office said: “The cold weather the UK saw in spring has kept pollen counts low, but as expected we have seen some very high pollen counts during the recent fine weather. Further high counts are expected during the settled, drier weather this week. We would therefore recommend that hay fever sufferer’s check the Met Office pollen forecast every day and do all that they can to manage their symptoms.”

The pollen season is split into three main phases with the grass pollen season lasting from mid May through to Aug. Our pollen calendar has a detailed breakdown of the different types of pollen and their peak times within a season.

The latest detailed pollen forecast for your area can be found on the Met Office website.

Date Created
June 2013

May weather summary video

Description

The cool theme which characterised the start of spring continued into May. Temperatures were somewhat below average for much of the month as winds prevailed from a northerly direction. The UK mean temperature was 9.5 °C which is 0.8°C below the 1981-2010 average. This made it the coldest May since 1996. In our video Forecaster Helen talks through the weather that defined May as well as pictures you sent in via Twitter.

For a full written summary of the weather in April visit the climate section of our website

Date Created
June 2013

From field to fork – gardening, cooking and the weather

Description

Following a colder than normal March and April, we talked to River Cottage head gardener Craig and sous chef Gelf about how the weather is impacting the food they grow and cook.

Reacting to the weather

Partly due to its setting in a valley, the River Cottage headquarters at Park Farm often experiences changeable weather conditions.

Craig checks the forecast several times a day to help plan the work of the gardening team; from planting to irrigation, their work is very much dependent on what the weather is doing.

Although forecasts help with day-to-day planning, it's not just the current weather that's important – longer term weather patterns also play a big part in Craig's work. Because of the particularly cold March, planting schedules were revised and some of this year's veg is growing slower than usual, so Craig also works with the kitchen to help them use the ingredients that's ready to eat now in their menus.

In our video, Craig and Gelf talk us through their roles at River Cottage and how they deal with the UK's variable weather conditions.

Gelf's rhubarb and brioche bread and butter pudding

When we visited, the rhubarb was ready to eat, so Craig picked some for Gelf to use in the kitchen. If you're salivating at the rhubarb and brioche pudding Gelf cooks in the video, you can recreate it at home using the recipe below.

½ a loaf of brioche

50 g softened unsalted butter

1 vanilla pod

500 ml cream

200 ml milk

3 duck eggs

2 duck egg yolks

125 g caster sugar

2 tbs rhubarb compote (500 g Washed rhubarb cut into 1 inch chunks, 100 g sugar, 50 mls water)

Place the rhubarb in a pan large pan with the water and sugar. Spread them out so it's as close to single layer as possible. Put a lid on and cook gently for 5 – 10 mins on the lower of the hot plates until soft. Don't stir it too much and it will retain some of its shape.

Remove the rhubarb from the heat and strain through a sieve to remove any excess juice. Allow to cool.

Cut the crusts off the bread and cut it in to slices that roughly correspond to the depth of the oven dish you have chosen for the pudding.

Spread both slices of the brioche with butter, then use any leftover butter to grease the dish.

Split the vanilla pod open lengthways and place it in to the pan with cream and milk. Then bring this almost to the boil. Remove from the heat and leave to infuse for a few minutes.

In a large bowl, whisk the eggs, egg yolks and caster sugar till until they are thoroughly blended. Remove the vanilla pod from the hot cream mixture then pour the cream over the eggs and sugar whisking all the time, until you have a thin but smooth and well blended custard. Arrange the first layer of the buttered bread slices in greased dish.

Half of the rhubarb compote over this. Place the next layer of brioche on top of this and spread the remaining rhubarb compote on top of this. Strain the custard over the brioche slowly and carefully, a little at a time, so it can seep and ooze between the cracks. If it looks like flooding over the side of the dish, wait a few minutes for it to soak into the bread before adding more. In any case, leave the pudding to infuse for about half an hour before you put it in the oven. You don't have to use all the custard, but you should use enough to make sure that only a few millimetres of unsoaked bread are at the top of the pudding.

Bake in a medium oven (170degrees/gas mark 3) for 35 – 35 minutes, until the top is golden brown and the custard is set but still slightly wobbly in the centre. This pudding is delicious hot, warm or cold and really needs no accompaniment.

Date Created

June 2013

Never mind the stories, summer is not over yet

Description

After a fortnight of settled and fine weather for most parts of the UK, we're now seeing more changeable conditions which have led to stories claiming summer is 'over before it even began'.

They point to our 30-day outlook, which it's fair to say does make reference to changeable conditions being likely to persist through into the start of July.

However, before we all write off summer, it's important to emphasise a couple of points.

Firstly, changeable weather isn't all bad. In this case it means we're likely to see mainly westerly winds which will allow weather systems to push in from the Atlantic, bringing spells of rain at times. But we'll also see some dry and bright or sunny spells at times too. So it's what you'd term as typically British weather and far from a 'wash out'.

Secondly, we're not even half way through June. Now, for us meteorologists, the summer runs until the end of August. That means even the 30 day outlook does not get us to half way through the season – so there is still plenty to play for in the forecast for summer 2013.

It's also worth pointing out that so far, summer has been pretty good – since it began on 1 June, somewhere in the UK has seen a temperature of 20C or above every day.

Date Created
June 2013

Discussing the UK's recent 'unusual seasons'

Description

There have been some media stories this morning about a meeting due to be held next week at the Met Office to discuss the recent run of unusual seasons here in the UK.

This will draw together some experts from across UK academia to discuss what happened in three specific seasons and examine some of the potential causes behind conditions.

Workshops of this kind are held on a regular basis on a great deal of issues across weather and climate science.

Collaboration and partnership working is also an integral part of the Met Office's work at the forefront of research on weather and climate.

Stephen Belcher, Head of the Met Office Hadley Centre and chair of next week's workshop, said: "We have seen a run of unusual seasons in the UK and Northern Europe, such as the cold winter of 2010, last year's wet weather and the cold spring this year.

"This may be nothing more than a run of natural variability, but there may be other factors impacting our weather. For example, there is emerging research which suggests there is a link between declining Arctic sea ice and European climate – but exactly how this process might work, and how important it may be among a host of other factors, remains unclear.

"The Met Office is running a workshop to bring together climate experts from across the UK to look at these unusual seasons, the possible causes behind them, and how we can learn more about those drivers of our weather. This will continue the UK's world class research effort to understand more about the drivers of monthly to seasonal climate across Europe."

Date Created
June 2013

Forecasting challenges this weekend

Description

Nick Grahame, Chief Forecaster at the Met Office, talks us through the forecasting challenges this weekend.

Sometimes the atmosphere can provide a real challenge for forecasters even in the shorter range. Take for example this weekend – there's a low pressure system over the west Atlantic and, on the face of it, appears to be heading our way. However, as it approaches our shores on Saturday night, forecast models are suggesting a large degree of uncertainty in terms of where it goes next. Some continue to bring it towards the southwest on Sunday, which would result in a rather miserable day for many southern areas. The other scenario though is for the low pressure system to stall and stay well away from us. If that happened then southern areas would stay fine and bright. In these situations, it is really important for forecasters and broadcasters to find a meaningful way to talk about the most likely outcome but then to also express the uncertainty. This is important for those who are planning events etc (it is Fathers Day on Sunday of course).

So why is there so much uncertainty?

Over the weekend, we are going to see some very complex patterns developing over the Atlantic which will ultimately determine where the low will track. For those who like technical speak, it's called a trough disruption and forecasting this phenomenon continues to be a major challenge to both computer models and humans alike. So the best thing to do is keep up to date with the forecast to get the latest on how things are expected to develop over this weekend.

Date Created
June 2013

Meeting on UK’s run of unusual seasons

Description

Weather and climate experts from across the UK came together at the Met Office’s HQ in Exeter today for a workshop to discuss the recent run of unusual seasons in Europe.

A total of 25 delegates attended including representatives from the Universities of Exeter, Leeds, Oxford, Reading and Imperial College London, as well as the Met Office.

Workshops of this kind are held on a regular basis on a great deal of issues across weather and climate science.

Today’s included sessions which looked at the weather patterns and their potential causes in three recent seasons – the cold winter of 2010/11, the wet summer of 2012, and this year’s cold spring.

Professor Stephen Belcher, Head of the Met Office Hadley Centre and chair of the meeting, said: “Ultimately what we’ve seen in each of these seasons is shifts in the position of the jet stream which impact our weather in certain ways at different times of year.

“The key question is what is causing the jet stream to shift in this way? There is some research to say some parts of the natural system load the dice to influence certain states of the jet stream, but this loading may be further amplified by climate change.”

There are a number of possible factors which could be ‘loading the dice’, including declining Arctic sea ice, solar variability, long-term ocean cycles, and other long-term cycles of natural variability.

The workshop focused on the latest research looking at how these drivers can influence weather patterns and discussed future research can be targeted to push forward understanding in this area.

Five out of the last six UK summers have seen above average rainfall (2010 is the exception, with average rainfall) and the workshop heard new evidence from the University of Reading suggesting that long-term Atlantic currents may be playing an important role.

These are understood to operate on cycles of a decade or more, which suggests that we may see their influence on our summers for a few more years to come. While these influence the odds of wet summers, it doesn’t rule out the possibility of decent summers over the next few years.

With regards to the cold winters, there is a wide range of drivers that could have an influence.

There is some initial evidence to suggest that changes in Arctic climate may also be making an impact.

Dr James Screen, from the University of Exeter, said: “There has been a lot of talk about declining Arctic sea ice playing a role in our weather patterns, but really that’s just one aspect of changes in the Arctic climate – which has seen rapid warming compared to other parts of the world.

“Those changes mean there is less of a difference in temperature between the Arctic and tropics, which could impact the position of the jet stream.”

Another driver of colder winter weather has already been identified and is known as Sudden Stratospheric Warmings (SSWs).

Recent research in this area has meant the Met Office was able to give good advice up to a month ahead on cold spells in recent seasons when they have been driven by this phenomenon. Variations in UV output from the sun have been identified as one potential driver of SSWs, but there may be others.

Professor Belcher said: “This workshop has looked at some really cutting edge research and helped us identify key areas for future work to improve our understanding of potential drivers of some of the unusual seasons we have seen.

“We’ll particularly be looking at the way oceans and the atmosphere exchange heat, as well as how models capture that process, the influence of the stratosphere, and which of the drivers we’ve looked at may be influenced by climate change.

“This work will help us continue our work to push forward understanding in this area so we can give better forecasts and advice on longer timescales in the future.”

List of attendees today:

Professor Stephen Belcher Met Office Deputy Director of Climate Science & University of Reading
Dr James Screen University of Exeter
Professor Sir Brian Hoskins Imperial College & University of Reading
Professor Rowan Sutton University of Reading
Professor Doug Parker University of Leeds
Professor Matthew Collins University of Exeter
Professor Peter Read University of Oxford
Professor Tim Palmer University of Oxford
Professor Lesley Gray University of Oxford
Dr William Ingram University of Oxford
Dr Len Shaffrey University of Reading
Professor Julia Slingo Met Office Chief Scientist
Professor Adam Scaife Met Office
Professor Richard Betts Met Office
Dr Gilbert Brunet Met Office
Cath Senior Met Office
Sana Mahmood Met Office
Ruth McDonald Met Office
Sean Milton Met Office
James Murphy Met Office
Dr Peter Stott Met Office
Dr Nick Dunstone Met Office
Chantelle Burton Met Office
Dr Nicky Stringer Met Office

Hazel Thornton Met Office

Info on recent unusual seasons in the UK

All facts are based on UK figures in the national records dating back to 1910.

Spring 2013 – mean temperature of 6.0 °C; 5th coldest in the series; coldest since 1962 (ie coldest in 51 years).

March 2013 – mean temperature of 2.2 °C; joint 2nd coldest in the series; coldest since 1962 (ie coldest in 51 years).

Year of 2012 – 1334.8 mm of rain; 2nd wettest year in the series; the wettest since 2000.

Summer of 2012 – 379.2 mm of rain; 2nd wettest in the series; wettest since 1912 (ie wettest for 100 years).

June 2012 – 149.0 mm of rain; wettest in the series.

April 2012 – 128.0 mm of rain; wettest in the series.

Winter 2010/11 – mean temperature of 2.43 °C, which is 1.3C below the 1981-2010 average;

December 2010 – mean temperature of -0.9 °C; coldest in the series.

Recent summers – five out of six recent summers have had above average rainfall, with only 2010 being average.

Three summers (2012, 2011, 2007) have seen the triple ‘disappointment’ of having below average temperatures, below average sunshine, and above average rainfall.

Date Created
June 2013

Media coverage on ‘wet summers for a decade’

Description

There has been a lot of media coverage today following a science workshop held at the Met Office HQ in Exeter yesterday.

Most of the articles go some way to capturing the science as it was delivered in the press briefing following the event – such as this article on the BBC News website. However, some stories, and particularly some headlines, do not.

The key point revolves around discussion of Atlantic ocean cycles, specifically one known as the Atlantic Multidecadal Oscillation (AMO), which can have an influence on UK summer weather.

Professor Stephen Belcher, Head of the Met Office Hadley Centre, and Dr James Screen, a NERC Research Fellow at the University of Exeter, were careful in their messaging about the AMO.

They talked about initial research which suggests this cycle, which can last for 10-20 years, can ‘load the dice’ to mean we may see a higher frequency of wetter than average summers before switching to its opposite phase, where we may see the opposite effect.

Currently, they said, it appears we are well into the ‘wet’ phase of this cycle, so it may continue to have an influence for a few more years to come.

That does not mean every summer will be a ‘washout’ for the next decade and shouldn’t be taken as a deterministic forecast for what we will see in the years to come.

First of all, we’ve seen five summers of higher than average rainfall in the last six years (with 2010 being the exception, which had average levels of rainfall). Even within each of those years we have seen periods of decent weather – so there’s no expectation of total washouts for the whole summer.

Secondly, the research suggests there is a tendency towards a higher frequency of wetter than average summers – so we could still see summers which buck this trend.

And finally, this research is still at an early phase and more work needs to be done to see exactly how this process works and how we can predict its influence on future seasons.

So, much like a blog we recently wrote about this year’s summer, it’s fair to say that you shouldn’t write off summers for the next decade or so.

We expect to be publishing a guest blog from scientists at the University of Reading on the science they presented to the workshop yesterday, so look out for that in the coming days.

You can now see video of the Professor Stephen Belcher speaking at the press conference which followed the science workshop on 18 June on our Youtube channel.

Date Created

June 2013

High levels of grass pollen forecast

Description

With many parts of the UK seeing periods of warmer, drier weather over the next few days, high pollen counts are forecast in places.

So far this season, we have seen relatively low pollen counts, due to the unsettled weather we've been experiencing at times. However, with the finer and warmer weather we've been experiencing, high pollen counts are forecast across many parts of the country.

The pollen forecast, sponsored by Benadryl®, uses our latest weather forecast information and combines this with pollen readings from across the UK. Detailed forecasts are available for locations across the UK via the Met office website.

Yolanda Clewlow, Health Manager at the Met Office said: "We have seen some very high pollen counts during the recent fine weather. Further high counts are also expected during periods of warmer, drier weather across most parts of England and Wales. However in Scotland the risk will be low to moderate. We would therefore recommend that hay fever sufferer's check the Met Office pollen forecast every day and do all that they can to manage their symptoms."

The pollen season is split into three main phases with the grass pollen season lasting from mid May through to Aug. Our pollen calendar has a detailed breakdown of the different types of pollen and their peak times within the season.
The latest detailed pollen forecast for your area can be found on the Met Office website.

Date Created
June 2013

Guest blog – How the Atlantic may influence wet summers

Description

This morning there has been a lot of media coverage following a workshop held here at the Met Office HQ in Exeter on a recent run of unusual seasons in the UK.

Much of this centred around recent research by the University of Reading, presented at the workshop yesterday, which suggested Atlantic ocean cycles – specifically one known as the Atlantic Multidecadal Oscillation (AMO) – can have an influence on UK summer weather.

Here Professor Rowan Sutton, from the University of Reading, explains that research in a bit more detail:

“Last year, Buwen Dong and I at the National Centre for Atmospheric Science published a paper in Nature Geoscience about the link between slow changes in the temperature of the North Atlantic Ocean and weather patterns.

In particular, we presented evidence of a link between warm surface temperatures in the North Atlantic and a higher frequency of wet summers in the UK and Northern Europe.

This research built on earlier research I published with another colleague, Dan Hodson, in Science in 2005 and an important study by Jeff Knight and colleagues at the Met Office, which was published in 2006.

In our 2012 paper we showed that a rapid warming of the North Atlantic Ocean which occurred in the 1990s coincided with a shift to wetter summers in the UK and northern Europe and hotter, drier summers around the Mediterranean. The pattern identified matched that of summer 2012, when the UK had the wettest summer in 100 years.

Observational records show that the surface temperature of the North Atlantic has swung slowly between warmer and cooler conditions, and the present warm phase has a similar pattern to warm conditions that persisted throughout the 1930s, 40s and 50s. During the 1960s, 70s and 80s cooler conditions prevailed.

Computer simulations suggest that these changes in ocean temperature affect the atmosphere above. Warmth in the North Atlantic causes a trough of low pressure over western Europe in summer and steers rain-bearing weather systems into the UK.

An important question of interest to many people is how long will the current pattern of wet summers in northern Europe persist? This is a key research question and we don’t yet have precise answers.

In our 2012 paper we stated: “Our results suggest that the recent pattern of anomalies in European climate will persist as long as the North Atlantic Ocean remains anomalously warm.”

How long might this be? There is strong evidence linking the swings in the Atlantic Ocean surface temperature to the “overturning” or “thermohaline” circulation of the Atlantic.

This circulation appears to have intensified in the 1990s. Following such a strengthening, a subsequent weakening is expected, as various feedbacks exert their influence.

For example, the surface warm waters transported northward by the overturning circulation have relatively low density which inhibits their tendency to sink, and acts to slow the circulation. Such a slowing cools the North Atlantic.

The time scales involved are in the range between a few years and a decade or two. Progress in Decadal Forecasting, such as the pioneering work at the Met Office, and critical observations such as from the NERC-funded “RAPID” array, should help us to reduce this large range of uncertainty, but it is a challenging problem and advances may take some years.”

Date Created
June 2013

Met Office in the Media: 23 June 2013

Description

There has been further coverage in the weekend papers following a workshop held here at the Met Office HQ in Exeter on a recent run of unusual seasons in the UK.

During the workshop new, early stage research by the University of Reading suggested that long-term Atlantic currents may be playing an important role in wet summers.

These are understood to operate on cycles of a decade or more, which suggests that we may see their influence on our summers for a few more years to come. While these influence the odds of a wet summer, it doesn't rule out the possibility of decent summers over the next few years. Professor Rowan Sutton of the University of Reading has provided a guest blog which explains the research in more detail.

The Met Office has been at the forefront of global weather and climate science for 150 years through continued investment in our scientific expertise and supercomputing technology.

We use more than 10 million weather observations a day, an advanced atmospheric model and a high-performance supercomputer to create 3,000 tailored forecasts and briefings a day. These are delivered to a huge range of customers from the Government, to businesses, the general public, armed forces and other organisations.

Weather forecasting isn't an exact science and we know that accuracy is the main driver of peoples trust in the Met Office. Recent surveys show that 83% of people trust the Met Office, 91% of the public said they found our forecasts useful and 76% said they were accurate.

We are an island nation with island weather and we forecast as accurately as we can without bias, regardless of what weather is expected. Our forecasts are right six days out of seven and we are consistently one of the top two operational weather forecasting services in the world. We can't change the weather, but we like to help in any other way we can.

Unbiased Met Office forecasts and warnings help us prepare for and protect ourselves in times of severe weather and help us enjoy the good weather when it is here.

The Met Office has worked with the tourism industry in recent years to provide detailed forecasts for resorts, beaches and attractions with local forecasts for up to 5,000 locations across the UK. All our forecasts provide local three-hourly detail of the weather with information on the chance of rain so that visitors can plan their day out with confidence and make the most of the great British weather come rain or shine.

We have also made these forecasts easier to access for holiday makers and attraction owners. Our website widget, which attraction owners can embed on their websites, gives visitors instant access to the latest observations, forecasts and warnings, not just for today but for the next five days.

Our award winning free weather apps for Android and iPhone also give easy access to our forecasts and warnings, 24 hours a day anywhere in the UK.

At the time of launch of these local forecasts, Mark Smith, Director of Bournemouth Tourism said: “These new forecasts from the Met Office communicate weather forecast information in clearer, more appropriate and user friendly ways that allow tourists and tourism operators to better plan activities.”

Date Created
June 2013

June set to be slightly drier and sunnier than average

Description

Provisional Met Office early June figures suggest that it has been drier than average and slightly sunnier than usual so far this month.

Rainfall for the UK from 1-26 June was 37.8 mm. At this stage we would expect to have seen about 87 % of the full month average, however we have only seen 52 %.

Up to the 26th we have seen 163 hours of sunshine in the UK, which is 96 % of the full month average – suggesting we are on track for a sunnier than average month.

However, the mean UK temperature up to the 26th has been recorded at 12.7 °C which is -0.3 °C below the 1981-2010 long-term average for the month.

The average maximum temperature so far this June is 17.1°C which is very close to the long-term average of 17.3 °C.

Looking at the individual countries, Scotland and Northern Ireland have had slightly above average temperatures so far. Scotland's mean temperature has been 11.5 °C (0.2 °C above average) and Northern Ireland's has been 13.0 °C (0.2 °C above average).

Wales had the most sunshine with190.6 hours, already above the full-month long-term average.

Northern Ireland has had the most rain so far with 79.8 mm compared with England's below average 27.5 mm and Scotland's 45.3 mm.

Temperatures of 26.4 °C at Herstmonceux, East Sussex (19 June) and Mickleham, Surrey (20 June) are the hottest days in the UK so far.

The hottest day in Wales so far this year was at Usk (25.1°C on 19 June).

Scotland's hottest day was at Glenlee (24.5 °C on 8 June) and Northern Ireland's hottest day of the year so far was on 9 June (24.5 °C) at Magilligan.

	Mean Temperature		Sunshine hours		Rainfall	
1-26 June	Actual	Diff from Avg	Actual	% of Avg	Actual	% of Avg
	degC	degC	hours	%	mm	%
UK	12.7	-0.3	163.0	96	37.8	52
England	13.4	-0.7	168.2	92	27.5	44
Wales	12.7	-0.5	190.6	110	45.9	54
Scotland	11.5	0.2	148.9	99	45.3	51

N Ireland	13.0	0.2	150.4	100	79.8	105

Date Created
June 2013